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Description of a New Species of the Genus *Hafenferrefia* Jacot  
(Acari, Tenuialidae)

Taxonomic Notes on Oribatid Mites of Hokkaido. I

*With 7 Text-figures*

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**ABSTRACT** *Hafenferrefia translamellata* spec. nov. is described from Hokkaido. It is the second representative of the genus *Hafenferrefia* and is distinguishable from the type-species, *H. nitidula* (Banks), by the complete translamella, the lamellar cusp with ventral dens, etc.

The family Tenuialidae is a small group of the oribatid mites, containing only 5 genera and 8 species, of which 6 have been known to occur in North America and the other two in Europe and Japan, respectively. In this paper will be given a new species occurring in Hokkaido, Japan. The new species is apparently to be referred to the genus *Hafenferrefia* Jacot, 1939, which is represented only by the type-species, *H. nitidula* (Banks, 1906) living in North America.

This paper is the first step to establish the oribatid fauna of Hokkaido, where the vast majority of the mites remains quite unknown.

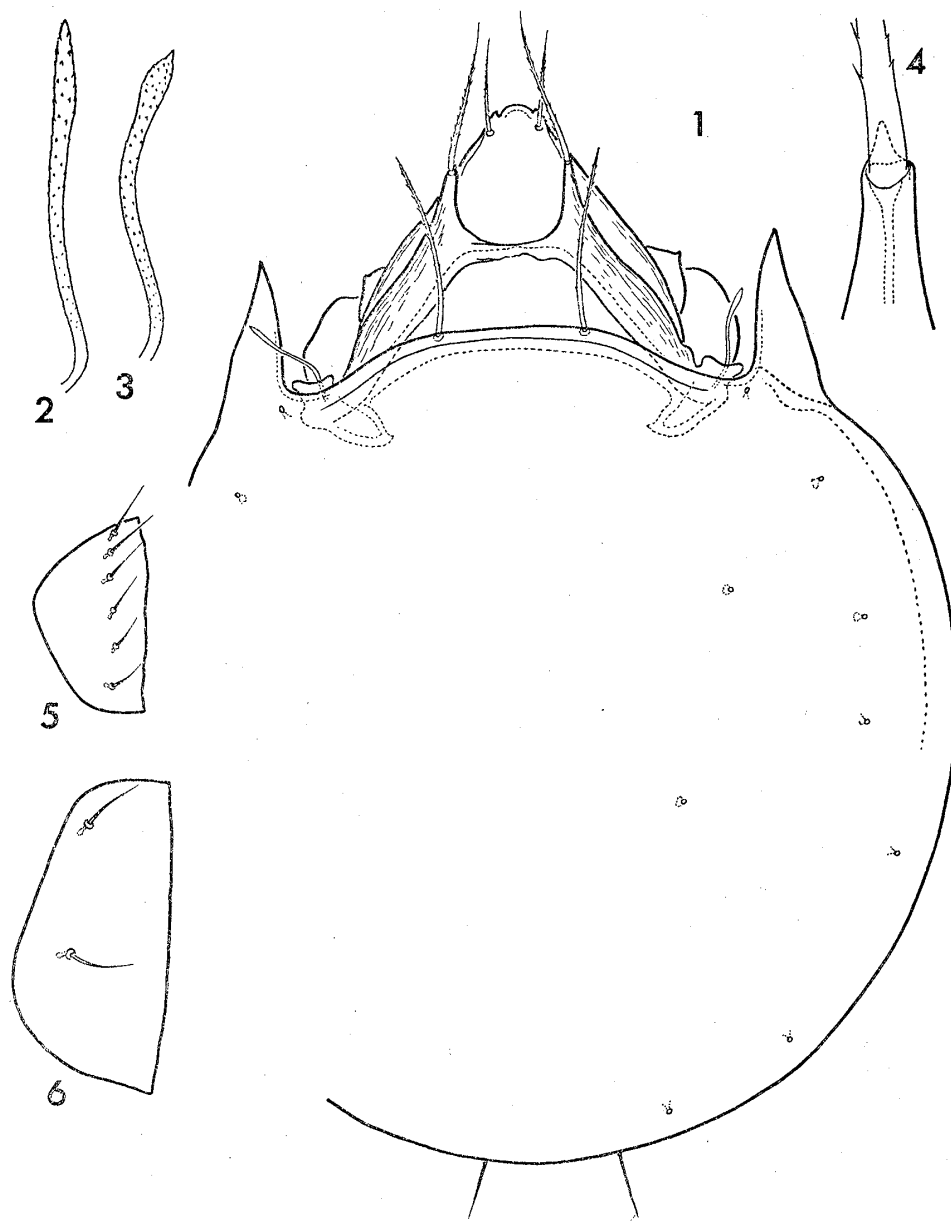
*Hafenferrefia translamellata* spec. nov.

(Figs. 1–7)

**Prodorsum** Rostrum with a notch on each side. Rostral setae long, distinctly longer than their mutual distance, each being situated on an inconspicuous apophyse. Lamellae  $3/4$  as long as propodosoma. Lamellar cusp  $1/3$  as long as lamella, with a small ventral dens (Fig. 4). Translamella complete, forming a rounded U-shape together with the inner sides of lamellar cusps. Rostral, lamellar and interlamellar

seta distinctly barbed, the ratio in length being about 1.0 : 1.5 : 2.0; lamellar seta nearly twice as long as free cusp of lamella. Insertions of interlamellar setae situated beneath anterior margin of notogaster. Sensillus almost baciliform and weakly roughened, the apical portion being slightly swollen (Figs. 2, 3).

*Notogaster* Anterior margin of notogaster convex, becoming rather straight medially. Pteromorpha sharply pointed anteriorly, just reaching the level of translamella, the median margin being sclerotized, especially on the posterior half. Nine pairs of setal insertions discernible in dorsal aspect, but notogastral setae



Figs. 1-6. *Hafenferrefia translamellata* spec. nov. Fig. 1. Dorsal side. Figs. 2. and 3. Sensilli. Fig. 4. Tip of lamellar cusp. Fig. 5. Genital plate. Fig. 6. Anal plate.

lacking except for 1 pair on the posterior end.

*Ventral side* Anal aperture slightly longer than wide, being provided with 2 pairs of anal setae well spaced. Three pairs of adanal setae nearly as long as anal one; distances  $ad_2 - ad_3 > ad_1 - ad_1 > ad_1 - ad_2$ . Small adanal fissures located at level almost mid-distance between anal setae  $an_1$  and  $an_2$ . Aggenital setae long and conspicuous,  $1/3$  as long as their mutual distance. Genital aperture somewhat wider than long, being separated from anal aperture at the distance equal to the length of the latter. Each genital plate with 6 pairs of long setae arranged in a longitudinal line. Setal formula for epimerata: (3-1-3-3), the setae being long, with pointed tips, longer than anal setae and shorter than aggenital ones; seta  $4b$  situated closer to  $4a$  than to  $4c$ .

*Legs* Measurements of tarsi, tibiae, genua and femora of legs I-IV reveal the following relationships in length:

$$TaI \doteq TaII \doteq TaIV > TaIII; TiIV > TiI \doteq TiIII > TiII;$$

$$GeI > GeII \doteq GeIII \doteq GeIV; FeI > FeII \doteq FeIV > FeIII$$

Chaetotaxy of legs:

$$I (22-6-4-5-1); II (18-5-4-4-1);$$

$$III (15-5-2-3-2); IV (12-4-3-1-1).$$

On tarsus I, seta  $ft'$ , solenidion  $\omega_2$  and famulus  $\epsilon$  inserted close to one another,  $ft'$  being situated anteroparaxially of  $\omega_2$ ; solenidion  $\omega_1$  located fairly apart from group of three setae, and rather close to  $ft''$  (Fig. 7). Each tarsus provided with 3 claws, of which the middle one is somewhat thicker than the others.

*Material examined* Holotype (NSMT-Ac-1): Sarobetsu Moor, Hokkaido, North Japan, 24-VII-1966, T. Fujikawa leg. The type will be deposited in National

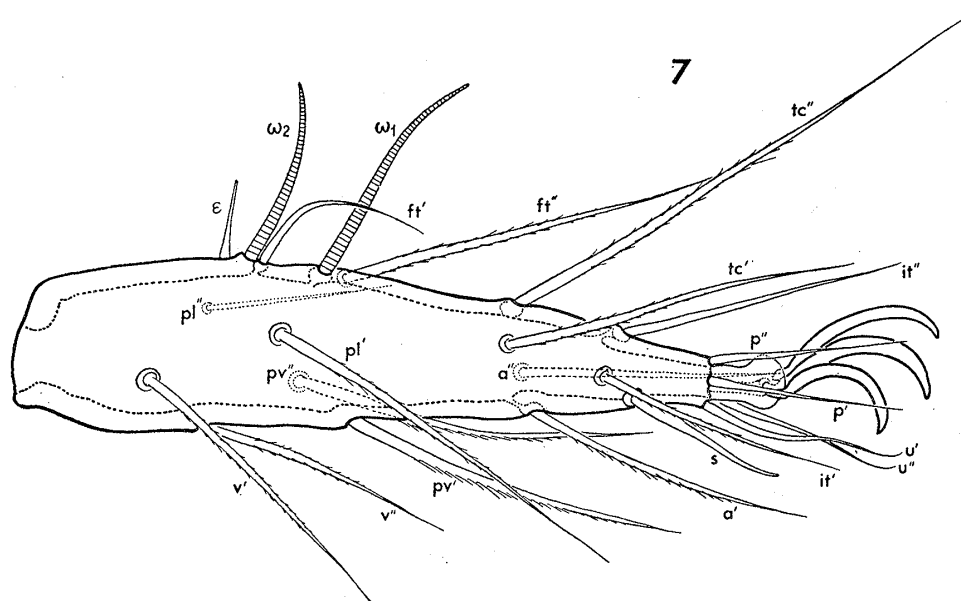


Fig. 7. *Hafenferrefia translamellata* spec. nov. Tarsus I (üaraxial side).

Science Museum, Tokyo.

*Measurement* Length: 1000  $\mu$ ; width: 900  $\mu$ .

*Remarks* The new species is closely related to *Hafenferrefia nitidula* (Banks, 1906), the type-species of this genus, which differs from the former by the following characters: (1) Incomplete translamella; (2) dens on lamellar cusp situated laterally; (3) rostral margin complete, not notched; (4) pteromorphae wider, far extending posteriorly to level of coxae IV; (5) interspace between genital and anal apertures much longer than length of the latter; and (6) 6 pairs of long notogastral setae.

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